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OM protein - protein search, using sw model

Run on: May 29, 2002, 11:38:47 : Search time 14.52 Seconds  
(without alignments)  
1088.386 Million cell updates/sec

Title: US-08-485-355b-50  
Perfect score: 3374  
Sequence: 1 MGDAGVASQRPNNRGTNRV.....GKIAARVARRARRARRAN 647

Scoring table:

BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*  
2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/PTUS.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/backfile1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3374	100.0	647	US-08-485-355B-50	Sequence 50, Appl
2	3374	100.0	647	US-09-194-613-3	Sequence 3, Appl
3	3033	89.9	675	US-08-485-355B-52	Sequence 52, Appl
4	289	8.6	634	US-09-194-613-6	Sequence 6, Appl
5	119.5	3.5	907	US-08-783-774-2	Sequence 2, Appl
6	119.5	3.5	907	PCT-US95-04611A-19	Sequence 19, Appl
7	116	3.4	1004	US-09-268-347-30	Sequence 30, Appl
8	113.5	3.4	551	US-08-793-229-32	Sequence 32, Appl
9	113.5	3.4	551	US-09-285-957-32	Sequence 32, Appl
10	113.5	3.4	816	US-07-731-157A-4	Sequence 4, Appl
11	113.5	3.4	816	US-08-229-44B-2	Sequence 2, Appl
12	113.5	3.4	816	US-08-541-780-4	Sequence 4, Appl
13	111	3.3	20	US-08-485-355B-24	Sequence 24, Appl
14	109	3.2	1302	US-08-232-537-2	Sequence 2, Appl
15	108	3.2	591	US-09-199-290-7	Sequence 7, Appl
16	107	3.1	775	US-07-603-133B-12	Sequence 12, Appl
17	106	3.1	618	US-09-199-290-34	Sequence 34, Appl
18	106	3.1	1138	US-08-323-474-8	Sequence 8, Appl
19	106	3.1	1138	US-08-469-537A-98	Sequence 98, Appl
20	106	3.1	1138	US-08-220-240A-5	Sequence 5, Appl
21	105.5	3.1	1611	US-08-804-227C-5	Sequence 5, Appl
22	102.5	3.0	497	US-08-570-311-2	Sequence 2, Appl
23	102.5	3.0	497	US-08-353-485-2	Sequence 2, Appl
24	102.5	3.0	686	US-09-306-922-2	Sequence 2, Appl
25	102.5	3.0	2628	US-08-570-311-14	Sequence 14, Appl
26	102	3.0	666	US-08-737-716-14	Sequence 14, Appl
27	102	3.0	1160	US-08-808-599A-24	Sequence 24, Appl

28	100.5	3.0	562	US-08-687-702-1	Sequence 1, Appl
29	100	3.0	346	US-08-687-702-36	Sequence 36, Appl
30	100	3.0	555	US-08-588-258B-24	Sequence 24, Appl
31	100	3.0	555	US-08-460-505-24	Sequence 24, Appl
32	100	3.0	555	PCT-US96-08295-24	Sequence 24, Appl
33	100	3.0	631	US-08-605-541B-12	Sequence 12, Appl
34	99.5	2.9	1724	US-08-857-076-12	Sequence 12, Appl
35	99.5	2.9	1912	US-08-409-995-4	Sequence 4, Appl
36	99.5	2.9	1912	US-08-685-467-4	Sequence 4, Appl
37	99.5	2.9	2353	US-09-377-155-33	Sequence 33, Appl
38	99.5	2.9	2353	US-08-913-942-4	Sequence 4, Appl
39	99.5	2.9	2353	US-09-669-974-33	Sequence 33, Appl
40	99.5	2.9	2354	US-09-268-347-47	Sequence 47, Appl
41	99.5	2.9	2411	US-09-268-347-36	Sequence 36, Appl
42	98.5	2.9	661	US-08-525-742-2	Sequence 2, Appl
43	98	2.9	292	US-08-286-888B-6	Sequence 6, Appl
44	97.5	2.9	632	US-08-443-104-4	Sequence 4, Appl
45	97.5	2.9	632	US-08-442-859-4	Sequence 4, Appl

#### ALIGNMENTS

RESULT 1  
US-08-485-355B-50  
Sequence 50, Application US/08485355B  
Patent No. 6177075  
GENERAL INFORMATION:  
APPLICANT: Christian, P. D., Gordon, K. H.J., Hanzlik, T. N.  
TITLE OF INVENTION: Insect Viruses and Their Uses in  
Protecting Plants  
NUMBER OF SEQUENCES: 57  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Flehr Hobbach Test Albritton & Herbert LLP  
STREET: Four Embarcadero Center, Suite 3400  
CITY: San Francisco  
STATE: California  
COUNTRY: United States  
ZIP: 94111-4187  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,355B  
FILING DATE: 07-Jun-1995  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/440,522  
FILING DATE: 12-MAY-1995  
APPLICATION NUMBER: US 08/089,372  
FILING DATE: 08-JUL-1993  
APPLICATION NUMBER: AU PL4081/92  
FILING DATE: 14-AUG-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Treagarlin, Richard F.  
REGISTRATION NUMBER: 31,801  
REFERENCE/DOCKET NUMBER: A-58631-2/RFT/DSS  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 781-1989  
TELEFAX: (415) 398-3249  
TELEX: 910 277299  
INFORMATION FOR SEQ ID NO: 50:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 647 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 50:  
US-08-485-355B-50

Query Match 100.0%; Score 3374; DB 4; Length 647;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 647; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MGDGVAASORPHNRGRNVRVSAANTVTYVNGRNRORRTGROVSPDNFTAAADLAQSL 60  
DB 1 MGDGVAASORPHNRGRNVRVSAANTVTYVNGRNRORRTGROVSPDNFTAAADLAQSL 60  
QY 61 DANTVFPANISSMPEFRNNAKGIKIDLSDSICGYFKYLDPAAGATESARAVGEYSKIPDG 120  
DB 61 DANTVFPANISSMPEFRNNAKGIKIDLSDSICGYFKYLDPAAGATESARAVGEYSKIPDG 120  
QY 121 LKFSVDAEIREINECEPVYTVDSVPLDGRQMSLSIFSPMERTAYVAVANENKEMSL 180  
DB 121 LKFSVDAEIREINECEPVYTVDSVPLDGRQMSLSIFSPMERTAYVAVANENKEMSL 180  
QY 181 DVVNDLEMLNADMRVYVDSSEQWINTDTYYVRIYRLRPYDVDPDEGLVTVSD 240  
DB 181 DVVNDLEMLNADMRVYVDSSEQWINTDTYYVRIYRLRPYDVDPDEGLVTVSD 240  
QY 241 YRLTYKAITCEANMPTLVDOGFWIGGYALTPSLPOYDVEAYALHTLTFARPSSAAL 300  
DB 241 YRLTYKAITCEANMPTLVDOGFWIGGYALTPSLPOYDVEAYALHTLTFARPSSAAL 300  
QY 301 AFYWAGLPQGGTAPAGTPAMEQASSGGYLTWRHNGTTFPAGSVSYLPEGFALERDND 360  
DB 301 AFYWAGLPQGGTAPAGTPAMEQASSGGYLTWRHNGTTFPAGSVSYLPEGFALERDND 360  
QY 361 GSWTDFASAGDITVFRQVAVDEVYVYNNPAGGSAFTFYVRPSSNATYNTYFRNTLLET 420  
DB 361 GSWTDFASAGDITVFRQVAVDEVYVYNNPAGGSAFTFYVRPSSNATYNTYFRNTLLET 420  
QY 421 RPSSRRLLEMPPADFGQTVANNPKIEQSILKETLGCYLVHSMKRNPFQOLTPASSFGAV 480  
DB 421 RPSSRRLLEMPPADFGQTVANNPKIEQSILKETLGCYLVHSMKRNPFQOLTPASSFGAV 480  
QY 481 SFNNPGYERTRLPDYTGIRDSFDQNMSTAVAHFRSLSHSCSYVTKYQGWEGYTNVNP 540  
DB 481 SFNNPGYERTRLPDYTGIRDSFDQNMSTAVAHFRSLSHSCSYVTKYQGWEGYTNVNP 540  
QY 541 FCGFAHAGLKNBEIICLADDLATRLTGYYPATDNFAAASAFANMLSSVLKSEATSSI 600  
DB 541 FCGFAHAGLKNBEIICLADDLATRLTGYYPATDNFAAASAFANMLSSVLKSEATSSI 600  
QY 601 IKSVEGTAVGAOSGLAKLPGLLMSYVGKIAARVRRARRARRAARAN 647  
DB 601 IKSVEGTAVGAOSGLAKLPGLLMSYVGKIAARVRRARRARRAARAN 647

RESULT 2  
US-09-194-613-3  
; Sequence 3, Application US/09194613  
; Patent No. 6251654  
; GENERAL INFORMATION:  
; APPLICANT: GORDON, Karl H.  
; TITLE OF INVENTION: MODIFIED SMALL RNA VIRUSES  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: McDermott, Will & Emery  
; STREET: 600 13th Street, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: USA  
; ZIP: 20005-3096  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/194, 613  
; FILING DATE: 30-NOV-1998

CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Bucca Ph.D., Daniel  
; REGISTRATION NUMBER: 42,368  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 202-756-8007  
; TELEFAX: 202-756-8007  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 647 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-09-194-613-3

Query Match 100.0%; Score 3374; DB 4; Length 647;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 647; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 MGDGVAASORPHNRGRNVRVSAANTVTYVNGRNRORRTGROVSPDNFTAAADLAQSL 60  
QY 61 DANTVFPANISSMPEFRNNAKGIKIDLSDSICGYFKYLDPAAGATESARAVGEYSKIPDG 120  
DB 61 DANTVFPANISSMPEFRNNAKGIKIDLSDSICGYFKYLDPAAGATESARAVGEYSKIPDG 120  
QY 121 LKFSVDAEIREINECEPVYTVDSVPLDGRQMSLSIFSPMERTAYVAVANENKEMSL 180  
DB 121 LKFSVDAEIREINECEPVYTVDSVPLDGRQMSLSIFSPMERTAYVAVANENKEMSL 180  
QY 181 DVVNDLEMLNADMRVYVDSSEQWINTDTYYVRIYRLRPYDVDPDEGLVTVSD 240  
DB 181 DVVNDLEMLNADMRVYVDSSEQWINTDTYYVRIYRLRPYDVDPDEGLVTVSD 240  
QY 241 YRLTYKAITCEANMPTLVDOGFWIGGYALTPSLPOYDVEAYALHTLTFARPSSAAL 300  
DB 241 YRLTYKAITCEANMPTLVDOGFWIGGYALTPSLPOYDVEAYALHTLTFARPSSAAL 300  
QY 301 AFYWAGLPQGGTAPAGTPAMEQASSGGYLTWRHNGTTFPAGSVSYLPEGFALERDND 360  
DB 301 AFYWAGLPQGGTAPAGTPAMEQASSGGYLTWRHNGTTFPAGSVSYLPEGFALERDND 360  
QY 361 GSWTDFASAGDITVFRQVAVDEVYVYNNPAGGSAFTFYVRPSSNATYNTYFRNTLLET 420  
DB 361 GSWTDFASAGDITVFRQVAVDEVYVYNNPAGGSAFTFYVRPSSNATYNTYFRNTLLET 420  
QY 421 RPSSRRLLEMPPADFGQTVANNPKIEQSILKETLGCYLVHSMKRNPFQOLTPASSFGAV 480  
DB 421 RPSSRRLLEMPPADFGQTVANNPKIEQSILKETLGCYLVHSMKRNPFQOLTPASSFGAV 480  
QY 481 SFNNPGYERTRLPDYTGIRDSFDQNMSTAVAHFRSLSHSCSYVTKYQGWEGYTNVNP 540  
DB 481 SFNNPGYERTRLPDYTGIRDSFDQNMSTAVAHFRSLSHSCSYVTKYQGWEGYTNVNP 540  
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DB 541 FCGFAHAGLKNBEIICLADDLATRLTGYYPATDNFAAASAFANMLSSVLKSEATSSI 600  
QY 601 IKSVEGTAVGAOSGLAKLPGLLMSYVGKIAARVRRARRARRAARAN 647  
DB 601 IKSVEGTAVGAOSGLAKLPGLLMSYVGKIAARVRRARRARRAARAN 647

RESULT 3  
US-08-485-355B-52  
; Sequence 52, Application US/08485355B  
; Patent No. 6177075  
; GENERAL INFORMATION:  
; APPLICANT: Christian, P. D., Gordon, K. H.J., Hanzlik, T. N.

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: TITLE OF INVENTION: Insect Viruses and Their Uses in
: Protecting Plants
: NUMBER OF SEQUENCES: 57
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Fleiter Hobdach Test Albritton & Herbert LLP
: STREET: Four Embarcadero Center, Suite 3400
: CITY: San Francisco
: STATE: California
: COUNTRY: United States
: ZIP: 94111-4187
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/485,355B
: FILING DATE: 07-Jun-1995
: CLASSIFICATION: <unknown>
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/440,522
: FILING DATE: 12-MAY-1995
: APPLICATION NUMBER: US 08/089,372
: FILING DATE: 08-JUL-1993
: APPLICATION NUMBER: AU PL4081/92
: FILING DATE: 14-AUG-1992
: ATTORNEY/AGENT INFORMATION:
: NAME: Trecartin, Richard F.
: REGISTRATION NUMBER: 31,801
: REFERENCE/DOCKET NUMBER: A-58631-2/RET/DSS
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (415) 781-1989
: TELEFAX: (415) 398-3249
: TELEX: 910 277299
: INFORMATION FOR SEQ ID NO: 52:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 675 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: SEQUENCE DESCRIPTION: SEQ ID NO: 52:
US-08-485-355b-52

Query Match      89.9%; Score 3033; DB 4; Length 675;
: Best Local Similarity 100.0%; Pred. No. 4,1e-279;
Matches 580; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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: DB 456 ELPMPADFGQTVANNKIEOSLKLKTLGCVLHVKMKNPVQLTPASSFGAVSFNNNGY 515
:
: DB 488 ERTDLPYTGIRDSFDONMSTAVAHFRSLSHSCSYVKKYQGWEGVTNNVTPFGQFAHA 547
:
: DB 516 ERTDLPYTGIRDSFDONMSTAVAHFRSLSHSCSYVKKYQGWEGVTNNVTPFGQFAHA 575
:
: DB 548 GILKNEELICLADDLATRLTGVPATDNFPAAVSAFANMMLSSVLSKSEATSIKSVGET 607
:
: DB 576 GILKNEELICLADDLATRLTGVPATDNFPAAVSAFANMMLSSVLSKSEATSIKSVGET 635
:
: DB 608 AVGAASGLAKPLGLMSVPGKIAARVARARRARRARAN 647
:
: DB 636 AVGAASGLAKPLGLMSVPGKIAARVARARRARRARAN 675
:
: RESULT 4
: US-09-194-613-6
: Sequence 6, Application US/09194613
: Patent No. 6251654
: GENERAL INFORMATION:
: APPLICANT: GORDON, Karl H.
: APPLICANT: HANZLIK, Terry N.
: TITLE OF INVENTION: MODIFIED SMALL RNA VIRUSES
: NUMBER OF SEQUENCES: 22
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: McDermott, Will & Emery
: STREET: 600 13th Street, N.W.
: CITY: Washington
: STATE: D.C.
: COUNTRY: USA
: ZIP: 20005-3096
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/194,613
: FILING DATE: 30-NOV-1998
: CLASSIFICATION: 424
: ATTORNEY/AGENT INFORMATION:
: NAME: Bucca Ph.D., Daniel
: REGISTRATION NUMBER: 42,368
: REFERENCE/DOCKET NUMBER: 50179-061
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 202-756-8000
: TELEFAX: 202-756-8087
: INFORMATION FOR SEQ ID NO: 6:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 634 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: US-09-194-613-6

Query Match      8.6%; Score 289; DB 4; Length 634;
: Best Local Similarity 25.7%; Pred. No. 1,4e-18;
Matches 177; Conservative 72; Mismatches 266; Indels 174; Gaps 39;

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Db 589 GISAGNAAKVV--VSGLKRGD-----ANFPLTSSADNLTKQYDNMAKGLTNDLK 639  
QY 539 -----TFP-----GQFAHAGLTKNEELLCLADLRLTGVPATONFPAVAASAFANMLSS 590  
Db 640 SKGQTPVADNTAATYAGDLGLGWISADTKGELNKEYAQAQVNAVEAFKSGNGINV 699  
QY 591 VLKS-----EATSSIKSVGETAVGAASGL 616  
Db 700 SKTLNDGTREITFEFLAKDENAFIAGSGSKAL 731

RESULT 8  
US-08-793-229-32  
; Sequence 32, Application US/08793229  
; Patent No. 5891703  
; GENERAL INFORMATION:  
; APPLICANT: VAN DER LAAN, Jan Metske  
; APPLICANT: RIEMENS, Adriana Martina  
; APPLICANT: QUAX, Wilhelmus Johannes  
; TITLE OF INVENTION: Mutated Penicillin G Acylase Genes  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: McDonnell Boenhen Hulbert & Berghoff  
; STREET: 300 South Wacker Drive  
; CITY: Chicago  
; STATE: IL  
; COUNTRY: USA  
; ZIP: 60606  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/793,229  
; FILING DATE: 23-APR-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: PCT/EP95/03249  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION: 97075  
; REFERENCE/DOCKET NUMBER:  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (312)913-0001  
; TELEFAX: (312)913-0002  
; INFORMATION FOR SEQ ID NO: 32:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 551 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-793-229-32

Query Match 3.4%; Score 113.5; DB 2; Length 551;  
Best Local Similarity 19.0%; Pred. No. 0.053;  
Matches 114; Conservative 53; Mismatches 213; Indels 221; Gaps 28;

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Db 97 RTMDQRRERIQVGOAQRREMTIMTVHGPVMOQFDYDGAAYSKKRSWDGYEVOSLLAMLN 156  
QY 74 MPEFRMAKGIKIDLSD---SIGWFK-----YLDPAGATESARAVGEYSKIPDLVK 123  
Db 157 VAKARNNTE-FLDOASGMAISIMTYADKNGNIGYSPA-----194  
QY 124 FSVDAELREIYNECPVTVDSVPLDG--RQMSLSIFSPMERTAYVAVAANENKEMSL 180  
Db 195 -----FLPQRPADQDQIRVPAKGDGSMEW-LGIKFSDAIPKAV-----NPPQGY 236  
QY 181 DVVNDLEIMLNADMRIVYVDSQWIMFTNDTTYIVIRVLRPIYDVDPDEGLVTRVSD 240

Db 237 -----LVNWNKKPAPDKTNTDTYYW-----TYGDMNELVSOQOKD-----LFSVOEI 280  
QY 241 YRLTFKATICEAN-----MPTLVDOGFWIGQYALTPTSLPODYSEAYALHTLTFAR 293  
Db 281 WEFQKASYSCLVNRWRYRPHLEKLAQO-----LPADSSKA-----316  
QY 294 PSSAALAFWAGLPQGGTAPAGTPAWEOASSGGYLTW---RHNGTFFPAGSVSYLPE- 349  
Db 317 ---ALTMLAMDGEQOGGONAGPARVL-----FKTWLEMYKQVLMF-----VYVES 362  
QY 350 -----GFALEKRYDPNDSWTDFAAGDTVTFRQYAVDEVYVTTNPPAGGSAPTFTVR 401  
Db 363 HRAMYSGTGFATQO-GNPES-----INLSMG-----388  
QY 402 VPPSNATNVTFRNTLLETSPSSRRLPLPMPADFGQ-----TYANNPKIEOSLKE 453  
Db 389 -----TKVLLRALVLEAPDPKRVV-----FGRRSDEIMHTALQN---AQALISQ 432  
QY 454 TLGCVLVHSMKRNPF-----QLTPASSFGAVSFNNPGYERTRLDPYTG I-- 499  
Db 433 EOGAQMARMTPTSVHRFSKDNFTGTPTQMPGNTFEFTGYQNGTEENRVRVFAKGVFEC 492  
QY 500 -----RDSFDQNNSTAVAHFRSLSHSCSVTKTYQGMGEVTNNVTFQGFAGAGLKE 553  
Db 493 DAMPGSGFTDRNGVRSPHYED-----OLKIYENFECKTM-----DVTIADIRRNA 539  
QY 554 E 554  
Db 540 Q 540

RESULT 9  
US-09-285-957-32  
; Sequence 32, Application US/09285957  
; Patent No. 6033823  
; GENERAL INFORMATION:  
; APPLICANT: VAN DER LAAN, Jan Metske  
; APPLICANT: RIEMENS, Adriana Martina  
; APPLICANT: QUAX, Wilhelmus Johannes  
; TITLE OF INVENTION: Mutated Penicillin G Acylase Genes  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: McDonnell Boenhen Hulbert & Berghoff  
; STREET: 300 South Wacker Drive  
; CITY: Chicago  
; STATE: IL  
; COUNTRY: USA  
; ZIP: 60606  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/285,957  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/793,229  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION: 97075  
; REFERENCE/DOCKET NUMBER:  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (312)913-0001  
; TELEFAX: (312)913-0002  
; INFORMATION FOR SEQ ID NO: 32:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 551 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein



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RESULT 11
: Sequence 2, Application US/08229444B
US-08-229-444B-2
: Patent No. 5695978
: GENERAL INFORMATION:
: APPLICANT: Quax, Wilhelmus J.
: TITLE OF INVENTION: Penicillin G Acylase, a Gene Encoding
: TITLE OF INVENTION: the Same and a Method for the Production of this Enzyme
: NUMBER OF SEQUENCES: 9
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Law Offices of Barbara Rae-Venter
: STREET: 260 Sheridan Avenue, Suite 440
: CITY: Palo Alto
: STATE: CA
: COUNTRY: USA
: ZIP: 94306
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/229,444B
: FILING DATE: 15-APR-1994
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/934,551
: FILING DATE: 19-AUG-1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/687,400
: FILING DATE: 18-APR-1991
: ATTORNEY/AGENT INFORMATION:
: NAME: Rae-Venter Ph.D., Barbara
: REGISTRATION NUMBER: 32,750
: REFERENCE/DOCKET NUMBER: GBRO-028/020S
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 415-328-4477
: TELEFAX: 415-328-4477
: INFORMATION FOR SEQ ID NO: 2:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 816 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
US-08-229-444B-2

Query Match 3.4%; Score 113.5; DB 1; Length 816;
Best Local Similarity 19.0%; Pred. No. 0.1;
Matches 114; Conservative 53; Mismatches 213; Indels 221; Gaps 28;

QY 18 RNRVRSAMTVYVNGRRNRORRTGROYSP-----DNTAAAOGLASLDANTYFFPANNISS 73
Db 362 RTMEQRKRRIQVGGADREMTIMRTVHGFVMOFDYDQGAYSKRRMSDGEVQSLAMIN 421
QY 74 MPEFNMAKGIKIDLSDD---SIGWFK-----YLDPAGATESARAVGEYSKIIPGLVX 123
Db 422 VAKARNWTE-FLDQASKMAISINWYIADKHGNGIYSPA----- 459
QY 124 FSVDAEIREIYNECPVYTVDSVPLDG---RQMSLSIFSFPMEFRTAYVAVANENKEMSL 180
Db 460 -----FLPQRPAPQDDIRVPAKGDSMEM-LGIKSFDAIPKAY-----NRPQGV 501
QY 181 DVANDLIMLNLLADMRVYVDSQWINTNTDTTYVYRIVRLPRTYDVPPTEGLVPTVSD 240
Db 502 -----LVMMNNKSPADKTKTDTYYW-----TYGDRMNELVSQYOQK-----LFSVOEI 545
QY 241 YRLVYKATTCEN-----MPTLVDOGFWIGGYALFTPSIYQVYVSEAYALHTLTLPAR 293
Db 546 WEPNQKASYSDVNNWRIFRPHLEKLAQ-----LPADSSKA----- 581

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Oy 294 PSSAALLFWAAGDGGTAPAGTPAMEAGSSGGYLTM---RHNGTTFPAGSVSYLPE 349
Db 562 ---ALTMLLANDGHEQDGGGNAGPARYL-----FKTWLEEMTKQVILMP-----VPES 627
Oy 350 -----GFALERYDPNDGSMWTFASAGDVTFRQVAVDEVVVTTNNPAGGSAPFTVR 401
Db 628 HRAWTSQGFATQQ-GPNPGS-----INLSWG----- 653
Oy 402 VPPSNATYNTYFRTLTETRRSSRLLELPMPPDQO-----TYANNPKIEQSLKE 453
Db 654 -----TRVLLRALVLEAHPDPKRVNV-----FGRSSQELMHTLQNL---AQAALSQ 697
Oy 454 TLGCGLVHRSKRNPVF-----QLTPASSFGAVSFENNPGYEXRTDLDPVTGI--- 499
Db 698 EGGAGMAWMTPTSVHRSQKNFTGTQTMGNMTFAFTGIONKGTENNRRVYFPAKGYEFC 757
Oy 500 -----RDSFDONNSTAVAHFRSLSHSCSYTKYQGMGEVYTNVTPGGFAHAGLLKNE 553
Db 758 DAMPGGQGFDRNGVRSPHED-----QLKLYENFECKTM-----DVTHADIRNA 804
Oy 554 E 554
Db 805 Q 805

RESULT 12
US-08-541-780-4
; Sequence 4, Application US/08541780
; Patent No. 593831
; GENERAL INFORMATION:
; APPLICANT: Quax, Wilhelmus J.
; APPLICANT: Misset, Onno
; APPLICANT: Van der Laan, Jan M.
; APPLICANT: Lenting, Herman B.M.
; TITLE OF INVENTION: Mutated beta-lactam acylase genes
; NUMBER OF SEQUENCES: 50
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: COOLEY GODDARD CASTRO HUDDLESON & TATUM
; STREET: FIVE PALO ALTO SQUARE, 4TH FLOOR
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/541,780
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/731,157
; FILING DATE:
; APPLICATION NUMBER: EP 90200962
; FILING DATE: 18-APR-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: RAE-VENTER PH.D., BARBARA
; REGISTRATION NUMBER: 32,750
; REFERENCE/DOCKET NUMBER: GBRO-027/0005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-494-7622
; TELEFAX: 415-857-0663
; TELEX: 380816 COOLEY PA
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 816 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-541-780-4

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Query Match 3.4%; Score 113.5; DB 2; Length 816;  
 Best Local Similarity 19.0%; Pred. No. 0.1;  
 Matches 114; Conservative 53; Mismatches 213; Indels 221; Gaps 28;

QY 18 RRVRSANTVTYVNGRRNRRTGROVSP-DMFTAAODLAQSLDANTVTFPANISS 73  
 DB 362 RYMEORKEIRIQVGOADREMTIMRTVHGVMQFDYDOGAAYSKRSMDCYEVOILLAWLN 421  
 QY 74 MEFNNMAGKIDLDSD-SIGWYFK-----YLDPGATESARAVEYSKIDGLVK 123  
 DB 422 VAKANNWE-FLDQASKMAISINWYADKHGNIYVSPA----- 459  
 QY 124 FSVDAEIRIYNECPVTVDSVPLDG---RQMSLISFSPMFRITAYVAVANENKESL 180  
 DB 460 -----FLPQRPADODIRVPAKGDSMEM-LGKSFDAIPKAY-----NPPQGY 501  
 QY 181 DAVNDLIEMLNLDAMRYVDSQMINFTNDTTYVRIRVLRPTVDVDPDTEGLVFTVSD 240  
 DB 502 -----LVNWNKRPADKNTDTYYW-----TYGDRMNELVSQYQKD---LFSVQEI 545  
 QY 241 YRLTKAITCEAN-----MPLVDQGFWIGGQYALPTSLPOYDVSEAYALHTLTFAR 293  
 DB 546 WEFNOKASISDVNMRYFRPHLEKLAQ-----LPADSSKA----- 581  
 QY 294 PSSAALAFVWAGLPDQGTAPAGTPAMEQASSGYLTW---RHNGTTFPAGSVSYLPE- 349  
 DB 582 ---ALTMILLAMQMGDOGGQNAQPARVL---FKTWLEENYKQVLLMP-----VTPES 627  
 QY 350 -----GFALERDPPNDGSWTDFRASAGDVTTFROVADEVVYVNNPAGGSAPFTYR 401  
 DB 628 HRAMYSQGFATQO-GPNIGS-----INLSNG----- 653  
 QY 402 VPPSNAYTWTVPRLTLETRPSSRRLLEPMPADFGQ-----TVANPKTEOSLKE 453  
 DB 654 -----TKVLRALVLEHNPDKRYN-----FGERSQOIMHTALON---AQRRLSQ 697  
 QY 454 TLGCVLVSHKMRPVF-----OLTPASSFGAVSFNNPGYERTFDLPDYGI--- 499  
 DB 698 EOGAOMARWMTPTSVHRSDDKNFTGTPTQMPGNTFAFGYQNRGTENNRRNVVDAGVEHC 757  
 QY 500 -----RQSFQNMSTAAVAFSLSHSCSYVTKYQGMEGVYNNVTPQGFHAGLIKKE 553  
 DB 758 DAMPGQSGFTDRNGVRSPHYED-----QIKLYNEFCKTM-----DVTHADIRRNA 804  
 -QY 554 E 554  
 DB 805 Q 805

RESULT 13  
 US-08-485-355B-24  
 : Sequence 24, Application US/08485355B  
 : Patent No. 6177075  
 : GENERAL INFORMATION:  
 : APPLICANT: Christian, P. D., Gordon, K. H. J., Hanzlik, T. N.  
 : TITLE OF INVENTION: Insect Viruses and Their Uses in  
 : Protecting Plants  
 : NUMBER OF SEQUENCES: 57  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: Fleier Hohbach Test Albritton & Herbert LLP  
 : STREET: Four Embarcadero Center, Suite 3400  
 : CITY: San Francisco  
 : STATE: California  
 : COUNTRY: United States  
 : ZIP: 94111-4187  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC-DOS/MS-DOS  
 : SOFTWARE: Patentin Release #1.0, Version #1.30  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/08/485,355B

FILING DATE: 07-Jun-1995  
 CLASSIFICATION: <unknown>  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/440,522  
 FILING DATE: 12-MAY-1995  
 APPLICATION NUMBER: US 08/089,372  
 FILING DATE: 08-JUL-1993  
 APPLICATION NUMBER: AU PL4081/92  
 FILING DATE: 14-AUG-1992  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Treccartin, Richard F.  
 REGISTRATION NUMBER: 31,801  
 REFERENCE/DOCKET NUMBER: A-58631-2/RFT/DSS  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 781-1989  
 TELEFAX: (415) 398-3249  
 TELEX: 910 277299  
 INFORMATION FOR SEQ ID NO: 24:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 20 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: unknown  
 TOPOLOGY: unknown  
 MOLECULE TYPE: protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 24:  
 US-08-485-355B-24

Query Match 3.3%; Score 111; DB 4; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 0.0003;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 255 PTLVDQGFWIGGQYALPTPS 274  
 DB 1 PTLVDQGFWIGGQYALPTPS 20

RESULT 14  
 US-08-232-537-2  
 : Sequence 2, Application US/08232537  
 : Patent No. 5516655  
 : GENERAL INFORMATION:  
 : APPLICANT: Peery, Robert B.  
 : APPLICANT: Skatrud, Paul L.  
 : TITLE OF INVENTION: MULTIPLE DRUG RESISTANCE GENE OF  
 : AUREOBASIDIUM PULLULANS  
 : NUMBER OF SEQUENCES: 4  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: Eli Lilly and Company  
 : STREET: Lilly Corporate Center  
 : CITY: Indianapolis  
 : STATE: Indiana  
 : COUNTRY: USA  
 : ZIP: 46285  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC-DOS/MS-DOS  
 : SOFTWARE: Patentin Release #1.0, Version #1.25  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/08/232,537  
 : FILING DATE:  
 : CLASSIFICATION: 435  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: Plant, Thomas G.  
 : REGISTRATION NUMBER: 35,784  
 : REFERENCE/DOCKET NUMBER: X9212  
 : TELECOMMUNICATION INFORMATION:  
 : TELEPHONE: 317-276-2459  
 : TELEFAX: 317-276-1917  
 : INFORMATION FOR SEQ ID NO: 2:  
 : SEQUENCE CHARACTERISTICS:  
 : LENGTH: 1302 amino acids

TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-232-537-2

Query Match 3.2%; Score 109; DB 1; Length 1302;  
Best Local Similarity 22.7%; Pred. No. 0.62;  
Matches 93; Conservative 52; Mismatches 147; Indels 118; Gaps 22;

QY 264 IGGGYALPTSLPODYSEAYALHTLTFARPSSAAALAFWAGLPQGTAPAGTPAME-- 321  
DB 291 LSAATAI-----RKSSAAMFL-GLVFTAYSANALAF-----MEGS 326  
QY 322 --QASSGGLTWRHNGCTTPAGSVYVLPFGFALERYPNDGSWTDFASAGDTVTFROVA 379  
DB 327 RLAAESS-----NAGGVYAV--VFLLIDASFVVGCGPFLGSPATMAAGESV----- 374  
QY 380 VDEVYVTTNMP-----AGGSAPFTVVRVPPSNAYNTVFRNT--LLETTPSSRRLE-- 428  
DB 375 ---YEILNHPOSEINVSSEAGQEAET-----ESDMKADLVFRNVTVEYVPA RTSARALEEM 425  
QY 429 -LMPPADPFGQTYANNKIKOSILKETLGCYLVHKKMRNVFOLTTPASSFGAVSFNNPGY 487  
DB 426 SLIKKAGQMAAIVGTSCGKSTLVSLRLRLDSSG-----QLT-IGSHDIKDFN---- 474  
QY 488 ERTTDLPTDYTGIRD-----SEDMNSTAVAHFRSLSHSCSIYTKTYOGMEGVTVNT 539  
DB 475 --VRSLSKRYALVDQDSVLFSGSVLENISYGLG-----EHSLSDDVYLEGCTEAKAANL 527  
QY 540 PEGGFANAGLL-----KNEELCLADLADLTLTGVPY--TDNFAAVSA 582  
DB 528 DVFDFLPQGHTRIGNGYTSLSGGQMRICLARALYKR-----PALLLLDDEFTALDA 581  
QY 583 FAANMLSSVLSKSEATSIISKSVGETAVGAO--SGLAKLGLLMSVSGKI 630  
DB 582 NSEGLMDAVKS-----VAATGTYVVAHRLSTVSDSPNIVLMGAKV 625

RESULT 15  
US-09-199-290-7  
; Sequence 7, Application US/09199290  
; Patent No. 6255084  
; GENERAL INFORMATION:  
; APPLICANT: Nielsen, Bjarne R.  
; APPLICANT: Nielsen, Ruby  
; APPLICANT: Lehmbeck, Jan  
; TITLE OF INVENTION: Thermostable Glucoamylase  
; FILE REFERENCE: 5279.200-US  
; CURRENT APPLICATION NUMBER: US/09/199,290  
; EARLIER FILING DATE: 1998-11-24  
; EARLIER APPLICATION NUMBER: 1557/97  
; EARLIER FILING DATE: 1997-12-30  
; EARLIER APPLICATION NUMBER: 0925/98  
; EARLIER FILING DATE: 1998-07-10  
; EARLIER APPLICATION NUMBER: 60/070,746  
; EARLIER FILING DATE: 1998-01-08  
; EARLIER APPLICATION NUMBER: 60/094,344  
; EARLIER FILING DATE: 1998-07-28  
; EARLIER APPLICATION NUMBER: 08/979,673  
; EARLIER FILING DATE: 1997-11-26  
; EARLIER APPLICATION NUMBER: 09/107,657  
; NUMBER OF SEQ ID NOS: 34  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 7  
; LENGTH: 591  
; TYPE: PRT  
; ORGANISM: Talaromyces emersonii  
US-09-199-290-7

Query Match 3.2%; Score 108; DB 4; Length 591;

Best Local Similarity 19.4%; Pred. No. 0.2;  
Matches 90; Conservative 55; Mismatches 180; Indels 140; Gaps 20;

QY 49 FTAADLAOSLDANTYTPAN-----ISSMEPEF-----RMN-----ANKIDL 87  
DB 188 FTTAVOHRALVEGNALATLHNTCSNCVSOAVQLCFLOSVTGTYVLANFGSGSRGK 246  
QY 88 DSDSIGWYFFYLDPPAGATE-----SARAVGEYSKIPDGLVFSVDAEIREIYNECEPV 140  
DB 247 DVNSILGSIHTFPDAGCDDSTFQPCARALANHKVYTD-----SFRSIIYAINSGI 297  
QY 141 VTDVSVPLDGR-----QW-----SLTSFPMERTA 166  
DB 298 AEGSAVAV-GRYPEDVYQGNPMYLATAAAEDLYDAIYQMKRIGSISITDVSLEPFODI 356  
QY 167 YVAVAVENKEMSLDYYNDLIEMLNLMDRVRVYVDSBOWINFTNDTTYVRIYVLRPTYD 226  
DB 357 YPSAA-VGITYNSGSTITFNDIISAVQTYGDIYLVKEIYTPDSGLTEQFSR----- 406  
QY 227 VPDPTEGLVTVSDYRLTYKA-ITCEANMPTLVDOGFWIGQYALPTSLPODYSEAYA 285  
DB 407 ---TDCTPLSASALTMVSASLLTASARQSV-----PASWGESASSVLA 449  
QY 286 LHTLTFARPSSAAALAFWAGLPQ-----GTPAGTPAMEQASSGGLTWRHNGCTTFA 340  
DB 450 VCSATSGTGPYSTATNTWMPSSGSGSTTTSAPCTTPTSVAATFDEIVSTSGETIYLA 509  
QY 341 GSVSYVLPFGFALERYPNDGSWTDFASAGDTVTFROVADEVVYVNNPAGGSAFTFY 400  
DB 510 GSI-----PELGNW-----STASAIPLRA---DAYTNSNPLM---YVIV 542  
QY 401 RVPPSNAYNTVFRN---LLETTPSSRRLELMPDPADFGQTV 441  
DB 543 NLPPGTSFEYKFFKNOTDGTIVMEDDPNRSYTV---PACGQGT 584

Search completed: May 29, 2002, 11:39:56  
Job time: 69 sec